

Systems Analysts-

What do they do?

Systems analysts solve computer problems and enable computer technology to meet individual needs of an organization. They help an organization realize the maximum benefit from its investment in equipment, personnel, and business processes. This process may include planning and developing new computer systems or devising ways to apply existing systems' resources to additional operations.

Systems analysts may design new systems, including both hardware and software, or add a new software application to harness more of the computer's power. Most systems analysts work with a specific type of system that varies with the type of organization for which they work — for example, business, accounting or

financial systems, or scientific and engineering systems.

Analysts begin an assignment by discussing the systems problem with managers and users to determine its exact nature. They define the goals of the system and divide the solutions into individual steps and separate procedures. Analysts use techniques such as structured analysis, data modeling, information engineering, mathematical model building, sampling, and cost accounting to plan the system. They specify the inputs to be accessed by the system, design the processing steps, and format the output to meet the users' needs. They also may prepare cost-benefit and return-on-investment analyses to help management decide whether implementing the proposed

system will be financially feasible.

When a system is accepted, analysts determine what computer hardware and software will be needed to set it up. They coordinate tests and observe initial use of the system to ensure it performs as planned. They prepare specifications, work diagrams, and structure charts for computer programmers to follow and then work with them to "debug," or eliminate errors from the system. Analysts, who do more in-depth testing of products, may be referred to as *software quality assurance analysts*. In addition to running tests, these individuals diagnose problems, recommend



solutions, and determine if program requirements have been met.

Computer systems analysts normally work for an organization in an office environment with comfortable surroundings. They usually work about 40 hours a week — the same as many other professional or office workers. However, evening or weekend work may be necessary to meet deadlines or solve specific problems. Given the technology available today, telecommuting is common for computer professionals. As networks expand, more work, including technical support, can be done from remote locations using modems, laptops, electronic mail, and the Internet.

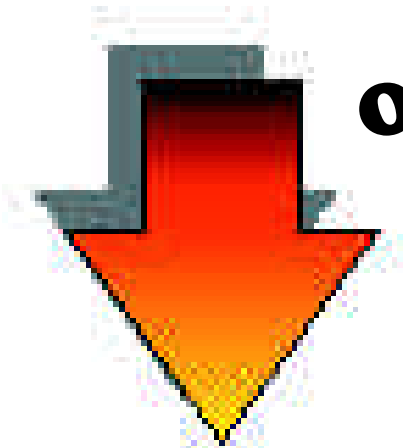
Like other workers who spend long periods of time in front of a computer terminal typing on a keyboard, analysts are susceptible to eye strain, back discomfort, and hand and wrist problems such as carpal tunnel syndrome or cumulative trauma disorder.

Source: adapted from the Occupational Outlook Handbook 2000-2001, Bureau of Labor Statistics

10 Highest Paying Jobs in New Hampshire	
Occupation	Ave. Hourly Wage ⁽¹⁾
Physicians & Surgeons	\$51.47
Dentists	\$43.62
Special Agents, Insurance	\$42.20
Health Practitioners, NEC	\$41.37
Physics Teachers, Postsecondary	\$35.71
Chemistry Teachers, Postsecondary	\$35.23
Lawyers	\$34.75
Optometrists	\$33.27
Engineering, Mathematics, & Natural Science Managers	\$33.25
Economics Teachers, Postsecondary	\$31.93

10 Occupations With The Most New Jobs Added in New Hampshire		
Occupation	New Jobs Gained ⁽²⁾	Ave. Hourly Wage ⁽¹⁾
Retail Salespersons	4,025	\$8.87
Registered Nurses	3,103	\$18.19
Cashiers	2,874	\$7.36
General Managers & Top Executives	2,699	\$28.99
Systems Analysts	2,364	\$25.31
Office Clerks, General	1,854	\$9.98
Nursing Aides, Orderlies, & Attendants	1,747	\$9.34
Computer Support Specialists	1,707	\$19.15
Teacher Aides, Paraprofessional	1,682	\$7.97
Marketing & Sales Supervisors	1,600	\$15.81

NEC=Not elsewhere classified (1) 1998 average wages. Wage rates include all levels of experience and should not be viewed as entry-level. Wages do not include self-employed workers. (2) Jobs added reflect anticipated gain between 1998 and 2008. They do not represent actual job openings.



On The Way Down

Many things should be taken into consideration when deciding upon a career choice. Certainly, what you enjoy doing is on the top of that list. How an occupation is fairing in the marketplace is another that could be considered. Here are several that are on the decline, with more positions open now versus the number projected for 2008.

Textile Machine Operator & Tender

So you want to be a machine operator and tender? What you need to know is that the occupation shows a declining rate of 32.5 percent from

1998 to 2008 for New Hampshire, with a projected loss of 246 positions by 2008. Workers in this occupation operate or tend textile machines that perform textile processing. The pay is an average of \$9.34 per hour, or just under \$19,500 a year. Most workers are trained through moderate-term (one to twelve months) on-the-job training.

Shoe or Leather Worker & Repairer

This occupation is estimated to decline at a rate of 26.1 percent from 1998 to 2008 in New Hampshire, losing 72 positions by 2008. Workers in this occupation construct, decorate, or repair leather products such as luggage, shoes, and saddles, using machines and hand tools. The average salary is \$7.35 per hour, or about \$15,200 a year. Workers usually train long-term (over twelve months) on-the-job.



Word Processor/Typist

The world of word processing and typists is estimated to decline at rate of 19.7 percent from 1998 to 2008 in New Hampshire, losing 225 positions by 2008.

Individuals in this occupation will use typewriter or word processing equipment to type such things as letters, reports, and forms, from rough draft, corrected copy, or voice recording. The salary for this occupation is an average of \$10.78 per hour, or just under \$22,500 per year. Training is usually moderate-term (one to twelve months) on-the-job.

Offset Lithographic Press Operator

This occupation is estimated to decline at a rate of 8.5 percent from 1998 to 2008 in New Hampshire, losing 23 positions by 2008. Workers

in this occupation set up or operate a web or sheet fed offset press to print single or multicolor products, such as forms, brochures, and flyers. The average salary is \$15.09 per hour, about \$31,400 a year. The most common training is long-term (over twelve months) on-the-job.

Announcers/Radio & TV

Thinking about a career in radio or TV? You need to know that this occupation shows an estimated declining rate of 13.3 percent from 1998 to 2008 in New Hampshire, losing 36 positions by 2008. People in this occupation introduce various types of programs, interview guests, or act as master of ceremonies. The average salary is \$9.79 per hour, about \$20,300 a year. The most common training is long-term (over twelve months) on-the-job.

